

Soil Science Division Update

David Lindbo, Director Soil Science Division
USDA-NRCS
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KNOW SOIL, KNOW LIFE or No Soil, No Life

Soil Science Division Update

- National Cooperative Soil Survey Strategic Plan
- Soils2026
- Focused Teams

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“By failing to prepare, you are preparing to fail.”

— Benjamin Franklin

*“In preparing for battle I have always found that plans are useless,
but planning is indispensable.”*

— Dwight D. Eisenhower

Strategic Planning

*“If you don't know where you are going, you'll end up someplace
else.”*

— Yogi Berra

*“It does not do to leave a live dragon out of your calculations,
if you live near him”*

— J.R.R. Tolkien, *The Hobbit*

Vision

A society that values soil
as an ecological resource

Mission

Provide knowledge about
soils and ecosystems for
resource management

Goals

1. Communicate the importance of soils to society
2. Increase the knowledge base for soils and ecosystems
3. Strengthen and expand collaboration
4. Ensure a critical mass of well-qualified scientists and technical specialists

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Soils2026 Vision

A complete, consistent, correct, comprehensive, and current inventory of the soil resources of the United States.

Soils2026 Mission

Collect, quantify, interpret, and communicate knowledge on soil science to the diverse community of scientists, land managers, and decision-makers dependent upon soil resources.

Ecological
Site
Descriptions

Soil Health

Soil
Inventory

Soils2026

Why Soils2026?

Demand has grown

- Water quality, quantity
- Urban agriculture
- Wetlands
- Climate change
- Watershed planning

Needs have changed

- Field to county to national in scope
- New customers
- Enhanced data
- Updates

An Iterative Approach

- Combine traditional field work with advanced technologies to increase our understanding of soil-landform-plant community relationships
- Develop national field weeks to address critical or emerging issues

An Iterative Approach

- Embrace a culture of continuous investigation and improvement
 - Increase knowledge of soil science
 - Increase use of technology and analytics
 - Increase flexibility for a variety of customer and resource needs

Expectations

- Flexible and adaptable to changing needs
 - Internal and external
- Authoritative information products
 - All products **national in extent** (no gaps)
 - Both properties and classes

Expectations

- Knowledge vs information
- Using maps vs making maps
- Services vs products
- Relational vs singularity
- Continuous vs completed
- Projects vs acres

Embrace a Culture of Continuous Investigation and Improvement

“... I cannot conceive of the time when knowledge of soils will be complete. Our expectation is that our successors will build on what has been done, as we are building on the work of our predecessors.” - *R.S. Smith, Director of the Illinois Soil Survey, 1928*

“... if this is to be a permanent nation we must save this most indispensable of all our God-given assets-the soil, from which comes our food and raiment. If we fail in this, remember that much sooner than we have expected this will be a nation of subsoil farmers.” - *H.H. Bennett 1933*

Resources

- 20 high priority positions
- Agreements with partners (\$800K)
- Supercomputer access (\$200K)
- Additional IT, PR, and programming support (\$100K)

The will to do better

Progress to Date

- Conceptual stage
 - Team leaders identified
 - Initial concept developed
 - Ideas presented to SSD Headquarters
- Further development of specifics and implementation required

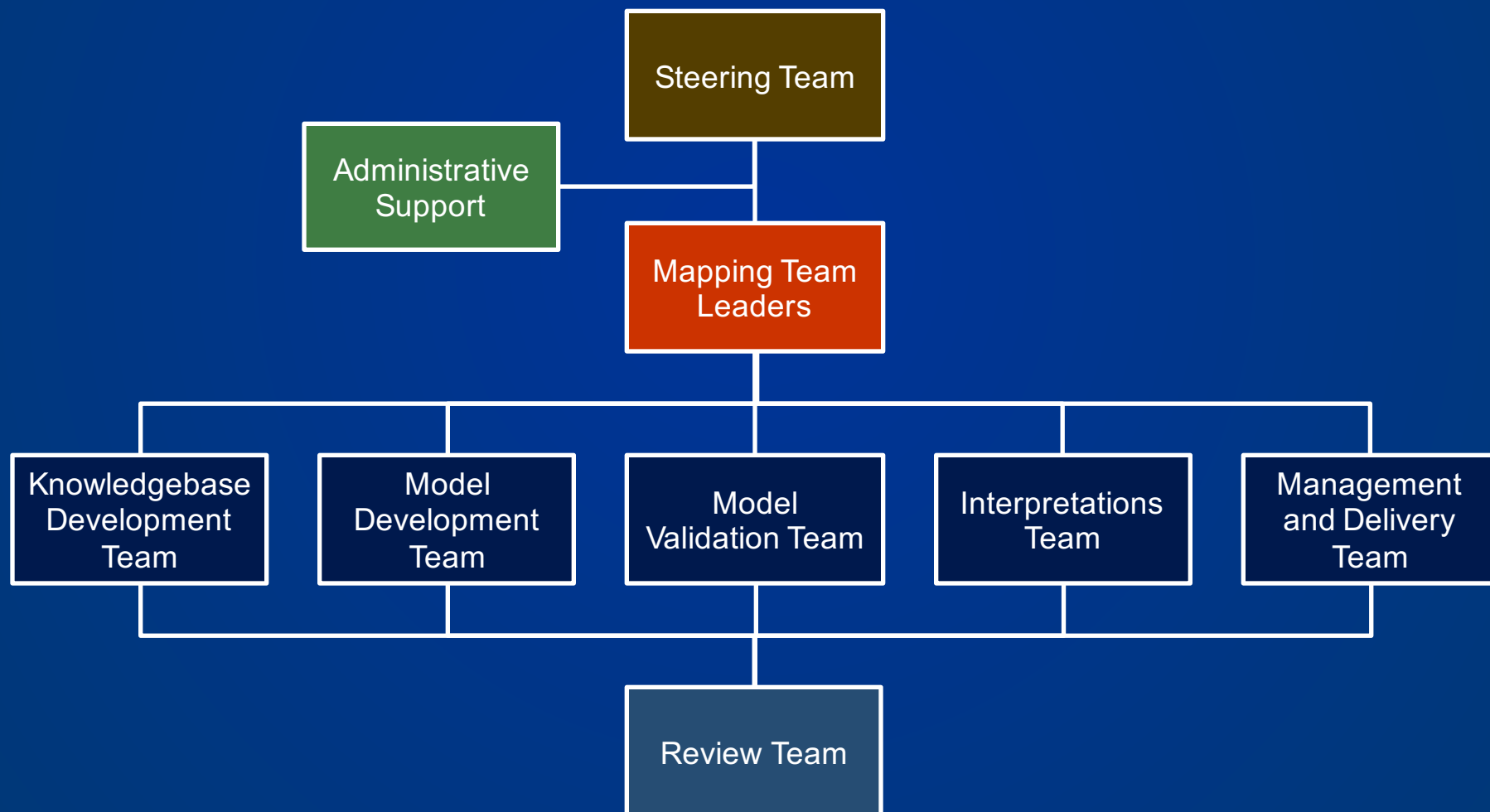
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Focused Teams

- Digital Soil Mapping
- Urban Soils
- Coastal Zone Mapping
- Training
- Soil Biology
- NASIS
- NCSS
- Taxonomy

Obligatory Organizational Chart





Talk to me

David Lindbo

david.lindbo@wdc.usda.gov

202-720-7848 office

202-251-3518 cell

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Questions?



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